## In the Claims:

Please amend Claims 1, 2, 10, 11, 13, and 26 as indicated below. The status of all pending claims is as follows:

- 1. (Currently Amended) An unauthorized access prevention system, including:
- a traffic recording unit recording information on traffic that flows into a user's communication network;
- a search unit searching, from the information recorded in the traffic recording unit, the flowing-in path of unauthorized access, which is transmitted from a transmitter and is included in the traffic, to services disclosed from a user's communication network;
- a determination unit determining a <u>countermeasure implementation</u>

  planning place place to implement a countermeasure for protecting the services from the unauthorized access based on a result of the search; and
- a notification unit notifying, according to a determination that the countermeasure is implemented in a flow source that makes the unauthorized access flow into the user's communication network, the determination of the place to implement the countermeasure to the a flow source adjacent to the user's communication network of the determination of the countermeasure implementation planning place, when the determination unit determines the flow source as the countermeasure implementation planning place for a reason that the unauthorized access was flowed into the user's communication network.

2. (Currently Amended) A recording medium in which a program that directs a computer to implement a countermeasure against unauthorized access is recorded and in which the program can be read by the computer, and the program directs the computer to perform the following processes by being executed by the computer:

a detection process of detecting an unauthorized access transmitted from a transmitter to services disclosed from a user's communication network; and

when the detection of the unauthorized access is notified, performs the following process:

a search process of searching the flowing-in path of the unauthorized access to the services disclosed from the user's communication network;

a determination process of determining a <u>countermeasure implementation</u>

<u>planning</u> place to <u>implement a countermeasure</u> for protecting the services from the unauthorized access based on a result of the search; and

a notification process of notifying, according to a determination that the countermeasure is implemented in a flow source that makes the unauthorized access flow into the user's communication network, the determination of the place to implement the countermeasure to the a flow source adjacent to the user's communication network of the determination of the countermeasure implementation planning place, when the determination unit determines the flow source as the countermeasure implementation planning place for a reason that the unauthorized access was flowed into the user's communication network.

## 3-4. (Cancelled)

- 5. (Original) The recording medium according to claim 2, wherein the process of searching the flowing-in path is performed by the computer based on the monitoring information on the traffic transmitted by a user's communication network and the unauthorized access information indicating the contents of the unauthorized access.
- 6. (Original) The recording medium according to claim 5, wherein the monitoring information includes at least the position information on an edge router arranged on the border between the user's communication network and the communication network adjacent to the user's communication network and the monitoring information on the traffic that flows into the user's communication network via the edge router.
- 7. (Previously Presented) The recording medium according to claim 2, wherein the notification process makes the computer execute a process of notifying the determination to the flow source after mutual attestation is conducted with the flow source of the unauthorized access.
- 8. (Original) The recording medium according to claim 2, wherein the process of notifying the determination to the flow source after information on a security policy for the operation of each network is exchanged with the flow source that transmits the unauthorized access is performed by the computer.

- 9. (Previously Presented) The recording medium according to claim 8, wherein information on a security policy is the information indicating the time required until the countermeasure against the unauthorized access is cancelled after the unauthorized access is not detected any more.
- 10. (Currently Amended) The recording medium according to claim 9, wherein when the time indicated by the information on the security policy differs between the <u>user' user's</u> communication network and the flow source, a shorter time of the two is used as the time required until the countermeasure against unauthorized access is cancelled after the unauthorized access is not detected any more.
- 11. (Currently Amended) The recording medium according to claim 10, wherein the process of notifying the flow source of the determination and the information indicating the time required tilluntil the countermeasure against the unauthorized access is cancelled after the unauthorized access is not detected any more is performed by the computer.
- 12. (Original) The recording medium according to claim 2, wherein the process of notifying the flow source of the unauthorized access of the determination using the communication path that differs from the flowing-in path of the unauthorized access is performed by the computer.

13. (Currently Amended) A recording medium in which a program that directs a computer to implement a countermeasure against unauthorized access is recorded and in which the program can be read by the computer, and the program directs the computer to perform the following processes by being executed by the computer:

a detection process of detecting an unauthorized access transmitted from a transmitter to services disclosed from a user's communication network; and

when the detection of the unauthorized access is notified, performs the following process:

a search process of searching the flowing-in path of the unauthorized access to the services disclosed from the user's communication network;

a determination process of determining <u>a countermeasure implementation</u>

<u>planning the place to implement a countermeasure for protecting the services from the unauthorized access based on a result of the search; and</u>

a notification process for judging whether, when it is determined that the eountermeasure is implemented in a flow source adjacent to the user's communication network is notified of the determination, when it is determined that the flow source is the countermeasure implementation planning place for a reason that makes the unauthorized access flow-was flowed into the user's communication network, the determination is notified to the flow source, wherein

the notification process notifies the flow source of the determination of the countermeasure implementation planning place, when it is judged that the flow source is notified of the determination, and

by having the program executed by the computer;

thean unauthorized access countermeasure implementation control process that has the countermeasure for protecting the services from the unauthorized access implemented in the flow source when it is judged that the determination will not be notified to the flow source based on the above notification process is further performed by the computer.

- 14. (Previously Presented) The recording medium according to claim 13, wherein the judgement is made based on judgement information on the flow source that is given in advance.
  - 15. (Original) The recording medium according to claim 2, wherein by having the program executed by the computer;

the unauthorized access countermeasure implementation control process that has the countermeasure for protecting the services from the unauthorized access implemented in the user's communication network based on the determination that said countermeasure is implemented in the user's communication network is performed by the computer.

16. (Original) The recording medium according to claim 15, wherein the process of implementing the countermeasure in the POP (point of presence) edge router to which the flow source of the unauthorized access is connected is performed by the computer.

- 17. (Previously Presented) The recording medium according to claim 16, wherein the process of identifying the POP edge router to which the transmitter is connected based on the information obtained from the operation management system that manages the operation of the user's communication network is further performed by the computer.
  - 18. (Original) The recording medium according to claim 15, wherein by having the program executed by the computer;

the process of obtaining a notification of the determination that unauthorized access to the services disclosed from a communication network different from the user's communication network is made to flow into said other communication network is further performed by the computer; and

the process of implementing the countermeasure for protecting the services disclosed from said other communication network from the unauthorized access related to the notification in the user's communication network when the notification is obtained by the notification obtaining process is performed by the computer.

19. (Original) The recording medium according to claim 15, wherein the countermeasure implemented by the unauthorized access countermeasure implementation control process is cancelled after the unauthorized access is not detected any more and a preset time passes.

- 20. (Previously Presented) The recording medium according to claim 19, wherein the preset time is set based on the security policy on the network operation of both the user's communication network and the other communication network.
- 21. (Original) The recording medium according to claim 20, wherein when the times set between the user's communication network and the other communication network based on the security policy on the network operation of both networks differ between both networks, the countermeasure is cancelled after the unauthorized access is not detected any more and a shorter time of the two passes.
  - 22. (Original) The recording medium according to claim 2, wherein by having the program executed by the computer;

the process of obtaining a notification of the determination that unauthorized access to the services disclosed from a communication network different from the user's communication network is made to flow into said other communication network is performed by the computer;

the process of searching the flowing-in path of the unauthorized access related to the notification in the user's communication network when the notification is obtained by the notification obtaining process is performed by the computer;

the process of determining the place to implement the countermeasure for protecting the services disclosed from said other communication network from the unauthorized access related to the notification based on the result of the search when the

notification is obtained by the notification obtaining process is performed by the computer; and

the process of notifying, according to a determination that the countermeasure is implemented in the flow source that makes the unauthorized access related to the notification flow into the user's communication network when the notification is obtained by the notification obtaining process, the determination to the flow source is performed by the computer.

23. (Original) The recording medium according to claim 22, wherein by having the program executed by the computer;

that has the countermeasure for protecting the services disclosed from the user's communication network or the other communication network from the unauthorized access related to the notification implemented in the communication network of the notification source of the notification when the notification obtained by said notification obtaining process is the same as that obtained in the past is further performed by the computer.

24. (Original) The recording medium according to claim 23, wherein the process of notifying the information that uniquely identifies the unauthorized access related to the notification when the determination is notified is performed by the computer.

25. (Original) The recording medium according to claim 2, wherein by having the program executed by the computer;

the process of recording the history of the notification is further performed by the computer.

26. (Currently Amended) An unauthorized access prevention method, including:

searching the flowing-in path of unauthorized access transmitted from a transmitter to the services disclosed from the user's communication network;

determining a <u>countermeasure implementation planning</u> place to implement a <u>countermeasure</u>-for protecting the services from the unauthorized access based on a result of the search; and

notifying, according to a determination that the countermeasure is implemented in a flow source that makes the unauthorized access flow into the user's communication network, the determination of the place to implement the countermeasure of the place to implement the countermeasure to the a flow source adjacent to the user's communication network of the determination of the countermeasure implementation planning place, when the determination unit determines the flow source as the countermeasure implementation planning place for a reason that the unauthorized access was flowed into the user's communication network.

## 27. (Cancelled)